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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,677	01/04/2002	Stephen Brian Falder	16644/09003CIP	9699
27530 7590 01/24/2008 NELSON MULLINS RILEY & SCARBOROUGH, LLP 1320 MAIN STREET, 17TH FLOOR COLUMBIA, SC 29201				
			EXAMINER PRYOR, ALTON NATHANIEL	
			ART UNIT 1616	PAPER NUMBER
			MAIL DATE 01/24/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Continuation of Disposition of Claims: Claims pending in the application are 1,46,52,53,61,62,70,71,78,82-85,88-92,95-100,105-107,111-113 and 115-137.

DETAILED ACTION

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 62,70,71,89,96,99, and 106 are no longer rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 62,70,71 recite the limitation "the at least one anti-microbial agent is selected from an amphoteric compound, an iodophore, ... and a nitrogen based heterocyclic compound" in lines 2-5. There is insufficient antecedent basis for this limitation in the claim. The claim broadens the scope of the antimicrobial agent in claim 1 which there exist no antecedent basis.

Response to Applicant's argument

Claims have been amended to recite "at least one of the anti-microbial agents" which cures the antecedent basis problem.

Claims 89,96,125 recite the limitation "the functional compound". There is insufficient antecedent basis for this limitation in the claim.

Response to Applicant's argument

Claims have been amended to replace "the functional compound" by "the functional material" which cures the antecedent basis problem.

Claim 99 recites the limitation "adding the at least one compound" in line 4.

There is insufficient antecedent basis for this limitation in the claim.

Response to Applicant's argument

The applicant is correct in that (ii) in claim 1 supports the (ii) in claim 99.

Therefore the language "adding the at least one compound" in claim 99 has adequate antecedent basis in claim 1.

Claim 106 recites the limitation "adding one first anti-microbial agent" in line 4.

The claim is confusing since claim 106 does not refer to adding a second or additional antimicrobial agent.

Response to Applicant's argument

The term "first" has been deleted from claims 1 and 106. The rejection is withdrawn.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1,46-49,52,53,59,61,62,70,71,78,82-85,88-92,95-100,105-134 are no longer rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for an antimicrobial agent comprising a dialkyldimethylammonium compound wherein the two non-methyl alkyl groups are selected from alkyl groups comprising 8 to 12 carbon atoms and a benzalkonium halide plus a compound selected from polydimethylsiloxanes and polydimethylhydroxysiloxanes, does not reasonably provide enablement for an antimicrobial agent comprising a quaternary ammonium

compound having the general formula in which one or two of the R groups alkyl substituted by aryl or interrupted by aryl or heteroatom (oxygen) and the other R groups being C1 to C4 alkyl groups or an aryl ring substituted benzalkonium halide plus at least one compound selected from silanes, soya lecithins, polydimethylsiloxanes, polydimethylhydroxy-siloxanes and mixtures thereof. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. Note applicant's Annex I and Annex II do not support a combination of a quaternary ammonium compound having the general formula $R_1R_2R_3R_4N^+X^-$, in which one or two of the R groups alkyl substituted by aryl or interrupted by aryl or heteroatom (oxygen) and the other R groups being C1 to C4 alkyl groups or an aryl ring substituted benzalkonium halide plus at least one compound selected from silanes, soya lecithins, polydimethylsiloxanes, polydimethylhydroxysiloxanes and mixtures thereof. However USPN 6656923 makes obvious an invention comprising a quaternary ammonium compound having the general formula in which one or two of the R groups are alkyl substituted by aryl or interrupted by aryl or oxygen (Hyamine 1622) plus polydimethylsiloxane. See art rejection below.

Response to Applicant's argument

No prima facie case of lack of enablement has been established. Therefore the rejection is withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,46,52,53,61,62,70,71,78,82-85,88-92,95-100,105-107,111-113,115-137 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trinh et al (USPN 6656923; 12/2/03). Trinh teaches an uncomplexed cyclodextrin composition comprising a cyclodextrin. Trinh teaches that the composition can comprise other ingredients such as water, surfactants and antimicrobial actives. See abstract, column 4 line 45 – column 6 line 21. Trinh teaches that the composition can comprise dimethyl polysiloxanes (hydrophobic) and an antimicrobial active. See column 9 line 47 – column 13 line 38 especially column 11 line 48 – column 12 line 63. Trinh teaches that such compositions provide superior antimicrobial activity. See column 4 lines 34-42. Trinh teaches that the antimicrobial active can be a quaternary ammonium compound such as Hyamine 1622 - hydrophilic (see column 13 line 47 – column 15 line 56 especially column 15 line 34) which meets the structural attributes of the instantly antimicrobial, i.e. Hyamine 1622 is a quaternary ammonium compound having the general formula $R_1R_2R_3R_4N^+X^-$, in which one or two of the R groups alkyl substituted by aryl or interrupted by aryl or heteroatom (oxygen) and the other R groups are C1 to C4 alkyl groups. Trinh teaches that to the cyclodextrin composition can be added phenolic compounds such as chloroxylenol, and isothiazolinones. See column 19 line 47 – column 20 line 44

especially column 20 lines 4, 21-23, column 24 lines 18-39. Trinh teaches a method of applying the composition to fabric (functional material). See abstract. Column 46 lines 23-59. It is an inherent property for antimicrobial active in a composition, after being applied to an object, to control microbe growth. Note, the simple act of combining and mixing ingredients is common in this art therefore the method of making the composition as described in claim 99 is not patentable. Trinh does not exemplify an invention specifically comprising dimethyl polysiloxane and Hyamine 1622. However, it would have been obvious to one having ordinary skill in the art to make such an invention. One would have been motivated to do this since Trinh encourages the making of compositions comprising uncomplexed cyclodextrin, Hyamine 1622 and dimethyl polysiloxane. See above. Note it is not necessary for Trinh to exemplify all possible combinations of ingredients suggested in order to make an invention obvious.

Response to Applicant's argument

Applicant argues that dimethyl polysiloxane taught by Trinh is structurally different from the polydimethylsiloxane recited in instant claims. However the Examiner argues that the dimethyl polysiloxane taught by Trinh is structurally similar to the polydimethylsiloxane recited in instant claims. The applicants provide no showing of how Trinh's dimethyl polysiloxane which is structurally similar to polydimethylsiloxane would affect the properties of the antimicrobial composition claimed differently from that of the instant polydimethylsiloxane.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Telephonic Inquiry

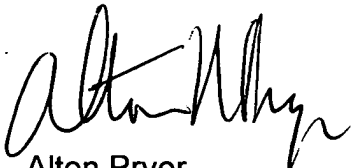
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alton N. Pryor whose telephone number is 571-272-0621. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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A handwritten signature in black ink, appearing to read 'Alton Pryor', is written over the printed name.

Alton Pryor
Primary Examiner
AU 1616